AIKO CT-1410

MODEL

SERVICE MANUAL

SPECIFICATION

SYSTEM		:	PAL- B/G			
			---- TV SECTION ----		CATV.	
CHANNEL COVERANGE	VHF LOW	:	2-4	CH.	Y-S1	CH.
	VHF HIGH	:	5-12	CH.	S2-S20	CH.
	UHF	:	21-69	CH.		
FREQUENCY RANGE	VHF LOW	:	47-68	MHz	75-111	MHz
	VHF HIGH	:	174-230	MHz	111-300	MHz
	UHF	:	470-862	MHZ		
VISION/SOUND SEPARATION		:	5.5	MHz		
FREQUENCY VIDEO IF		:	38.9	MHz		
SOUND IF		:	33.4	MHz		
SENSITIVITY	VHF LOW	:	47	dBuV		
(AT 30dB S/N)	VHF HIGH	:	47	dBuV		
	UHF	:	50	dBuV		
SCANNING LINES		:	625	lines		
HORIZONTAL		:	15625	Hz		
VERTICAL		:	50	Hz		
OUTPUT POWER MAXIMUM		:	1800 mW			
10% THD		:	1300 mW			
C R T .		:	20" DIAGONAL, 90 DEGREES DEFLECTION ANGLE			
SPEAKER		:	4" 8OHM 3W x 2			
ANTENNAL EXTERNAL		:	75	OHM		
POWER CONSUMPTION		:				

VIF ALIGNMENT

A. Preparation Step (See Fig. 1)

(i) Connect AGC bias voltage to TP101, the DC supply should be turned off this time.

(ii) Connect 14V B+ bias voltage to D404 (-) and Ground.

(iii) Connect sweep generator to tuner test point and Ground.

(iv) Connect waveform detector to TP105 and Ground.

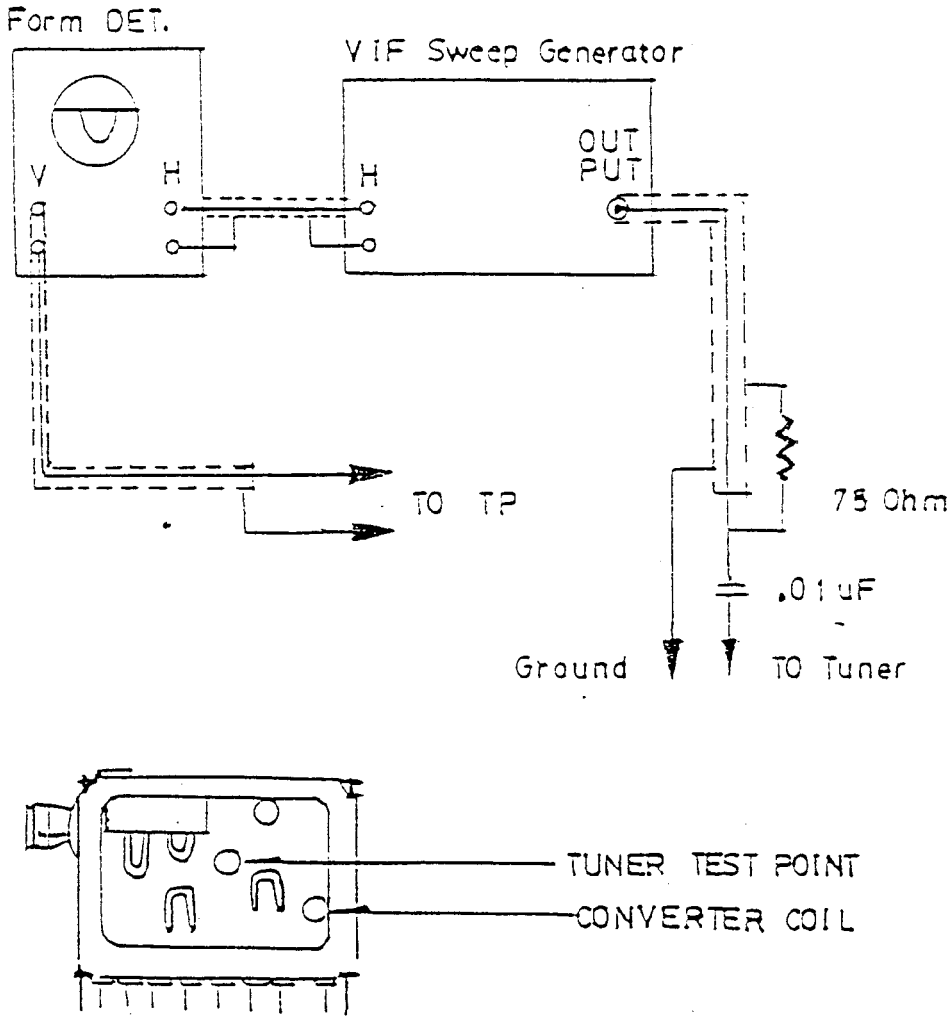


Fig.1

B. Tank Coil Alignment Step (See Fig. 2)

(i) Calibate the Division of waveform Detector equal to 100 mV per div.

(ii) The output of sweep generator should be -50dB.

(iii) Connect TP001 to Ground.

(iv) Adjust AGC bias until the output waveform equal to 1V p.p. (10 div.)

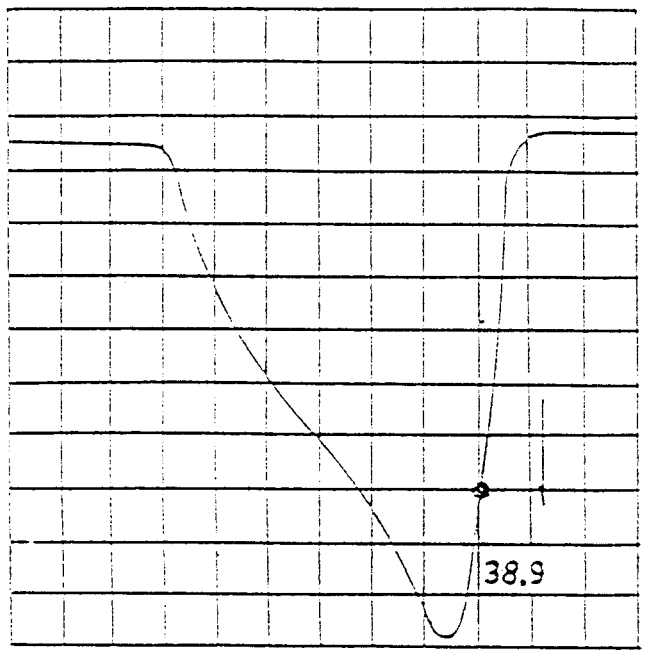


Fig. 2

(v) Turn T101 until the marker 38.9MHz falls to the lowest point as Fig.2.

D. AFC Alignment

(i) Remove the 100 ohm resistor from TP103 and TP104.

(ii) Connect the waveform detector to TP102. The output of sweep generator should be -40dB.

(iii) Adjust AGC bias to 5V.

(iv) Adjust T103 to obtain waveform as Fig.4.

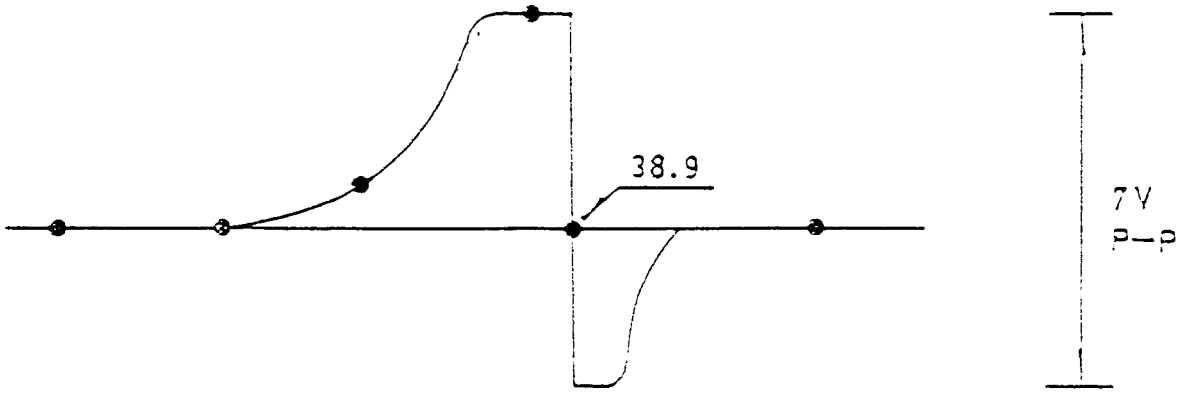


Fig.4

C. VIF Alignment

(i) Connect 100 ohm resistor between TP103 and TP104.

(ii) Adjust T104 until obtain the maximum waveform amplitude. (If Provided.)

(iii) Adjust AGC bias, and maintain the waveform achieve 1V pp.

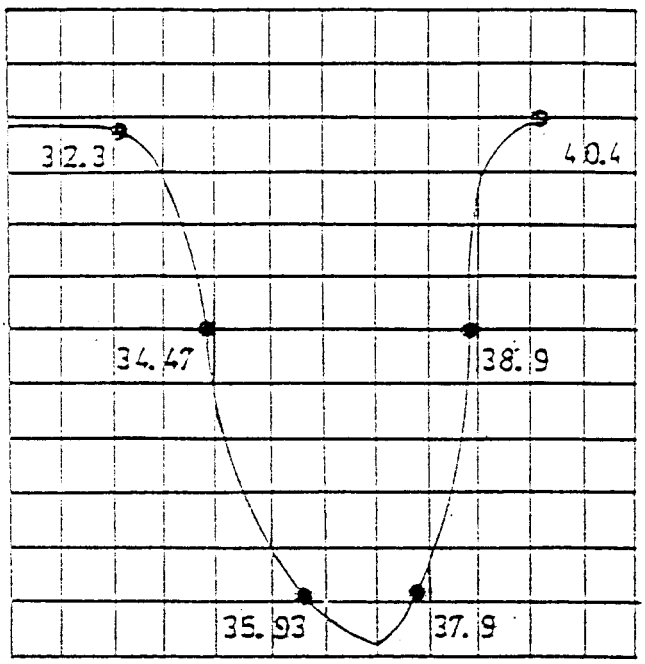
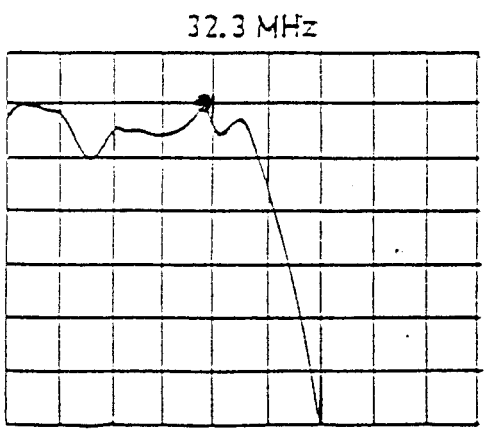


Fig.3

(v) Increase the output level of sweep Generator.

(vi) Turn T101 to obtain waveform as follow:



B+ ADJUSTEMNT
1) Connect a digital volt meter to TPB+ and ground.
2) Set Brightness, contrast and colour to maximum.
3) Adjust VR901 and obtain a reading of 112V.

HORIZONTAL CIRCUIT ADJUSTMENT
1) Receive Monoscope Pattern input signal 80dBuV.
2) Connect terminal TP305 and the earth with the short Jumper wire.
3) Adjust VR304 to obtain the picture running at center.
4) Adjust VR303 to obtain the picture at center.

VERTICAL CIRCUIT ADJUSTMENT
1) Receive the Monoscope Pattern.
2) Adjust V-size (VR301) to obtain a normal picture.

WHITE BALANCE ALIGNMENT STEP
(deguss the picture by dequassing coil if necessary)
1) Turn the brightness, contrast and picture control to minimum value.
2) Turn VR501,503,505 to middle position. Turn VR502,504 to minimum position.
3) Turn VR306 to middle position.
4) Receive a black and white pattern.
5) Set S301 to service position.
6) Turn off the screen voltage.
7) Turn on the screen control volume on flyback transformer, & a horizontal red line appears.
8) Adjust VR502 to obtain a yellow line.
9) Adjust VR504 to obtain a white line.
10) Set S301 to normal position.
11) Adjust vR503, 505 to make the picture uniformly white.(9300°K)

SUB-BRIGHTNESS ALIGNMENT
1) Receive a colour bar pattern.
2) Turn the brightness, contrast and colour to minium.
3) Adjust VR306 until the brightest bar can just be seen.

FOCUS ALIGNMENT
1) Set the brightness and contrast to middle position.
2) Receive a monoscope pattern.
3) Adjust focus control to obtain sharpest picture.

AGC ALIGNMENT
1) Receive CH69 (UHF) and input field strength in 63dB ±3dB input.
2) Adjust VR101 to the point where noise is disappeared.

B. SIF Alignment

(i) Connect the sweep generator to TP105.

(ii) Connect waveform detect to TP106.

(iii) The output of sweep generator should be -50dB.

(iv) Adjust T102 to obtain the waveform as Fig.5.

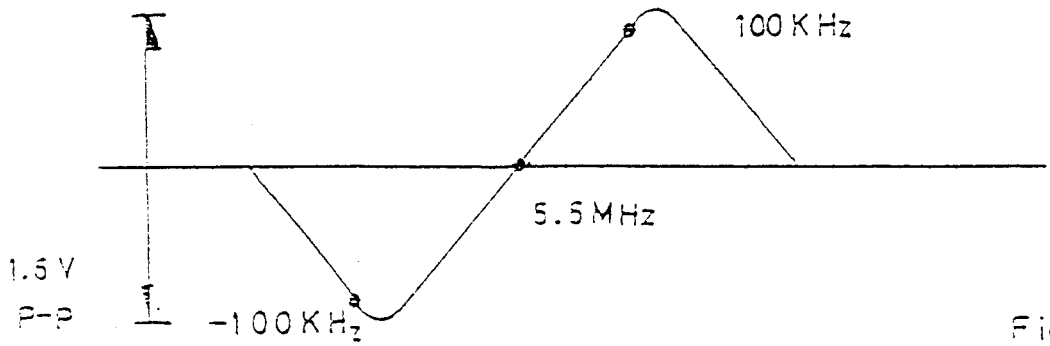
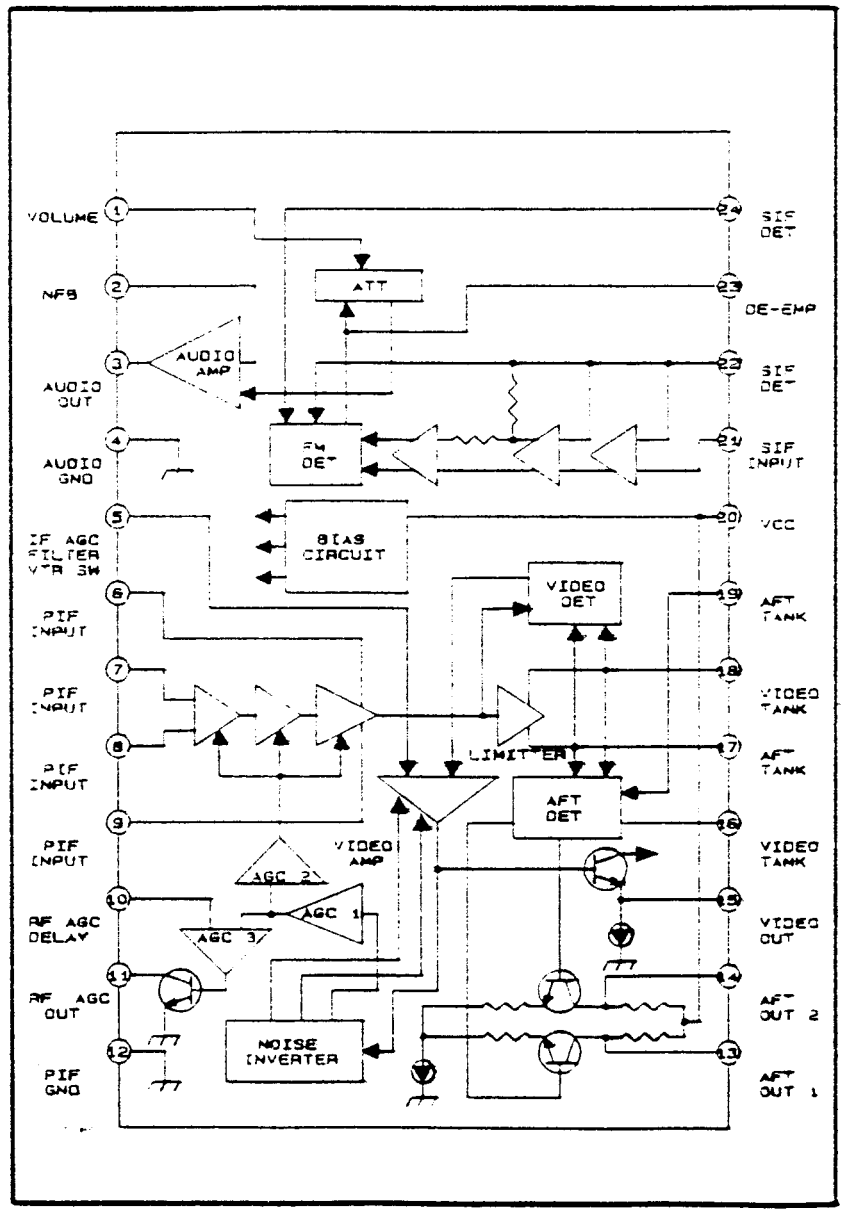


Fig:5

IC102 TA7680AP



VOLTAGE TABLE FOR IC

SYMBOL / PIN NO.	IC101 (V)	IC102 (V)	IC601 (V)	IC301 PAL	IC301 SECAM
1	4.4	4	4.86	3.7	
2	0	1.9	4.86	12.23	
3	0	7	0	4.55	
4	1.6	0	0	4.37	
5	GEN	6.64	NC	1.1	
6	13.22	4.85	NC	9.6	
7	11.55	4.87	4.86	6.1	
8	2.1	4.87	2.4	9.5	
9	11.67	4.85	4.84	6.1	
10		4.64	0.67	7.5	
11		3.97	6.6	0	
12		GEN	4.13	9.4	
13		4.76	9.3	9.9	
14		8.34	4.85	3.6	
15		3.55	0	3.6	
16		4.17	1.3	8.6	
17		7.93	1.9	4.2	
18		7.93	GEN	8.8	
19		4.17	GEN	4.2	
20		11.66	0.86	7.5	
21		4.5	GEN	7.5	
22		4.5	1.46	7.4	
23		2.79	4.86	5.8	
24		4.5	1.6	0.8	
25			4.86	4	
26			0.2	8	
27			0.2	7.9	
28			0.2	-0.4	
29			0.56	2.9	
30			0	GEN	
31			0	GEN	
32			0.34	0.4	
33			4.1	8.6	
34			2.26	4.7	
35			2.27	5.1	
36			0.1	3.2	
37			NC	-0.2	
38			4.7	0.8	
39			4.0	4	
40			0.2	6.5	
41			0.08	7.8	
42			4.86	9.4	

NOTE : VOLTAGE ARE TAKEN UNDER TUNED CONDITION WITH

CONTRAST : Maximum Position
BRIGHTNESS : Maximum Position
COLOR : Maximum Position
SIGNAL INPUT : 80 dBuV
CHANNEL SETTING : The Last Channel of UHF High
SIGNAL PATTERN : Colour Bar

VOLTAGE TABLE FOR TRANSISTOR							
SYMBOL	B (V)	C (V)	E (V)	SYMBOL	B (V)	C (V)	E (V)
Q001	4.3	12.29	3.64	Q505	7.45	124.2	6.27
Q002	12.29	0	4.62	Q601	2.64	200.29	3.34
Q003	2.58	0	3.3	Q602	0	2.27	0
Q004	0.12	12.29	0	Q603	0.65	0.02	0
Q005	0.11	0.11	0	Q604	-0.53	4.54	0
Q101	4.86	11.68	4.02	Q605	-0.05	4.68	0
Q102	1.11	8.48	0.37	Q606	0.71	0.16	0
Q103	0.07	21.35	0	Q607	0.04	4.86	0
Q104	0.115	7	0	Q608	0.66	0.04	0
Q105	3.66	11.7	3.0	Q609	5.51	74.67	4.87
Q201	17.08	16.64	16.48	Q610	0.09	4.78	0
Q301	0.02	3.59	0	Q611	0.43	0.99	0
Q302	0.02	4.39	0	Q612	0.64	0.09	0
Q303	0.74	0.13	0	Q901	2.25	4.79	1.99
Q304	6.34	0.73	6.58	Q902	0.62	-2.2	-1.2
Q401	0.53	69.24	0	Q903	-2.2	-1.5	0
Q402	-0.11	112.12	7.01	Q904	-3.3	125.3	-2.1
Q501	7.43	126.2	7				
Q503	7.48	127.1	7.07				
Q504	2.18	127	4.61				

NOTE : VOLTAGE ARE TAKEN UNDER TUNED CONDITION WITH

CONTRAST : Maximum Position

BRIGHTNESS : Maximum Position

COLOR : Maximum Position

SIGNAL INPUT : 80 dBuV

CHANNEL SETTING : The Last Channel of UHF High

SIGNAL PATTERN : Colour Bar

PAL. COLOUR ALIGNMENT

(1) Receive Philips Pattern.

(2) Connect Oscilloscope to 22 pin of IC801.

(3) Set the service switch (S301) to service position.

(4) Set color control to maximum position.

(5) Adjust T301, 302 and VR305 to obtain the waveform as Fig.6.

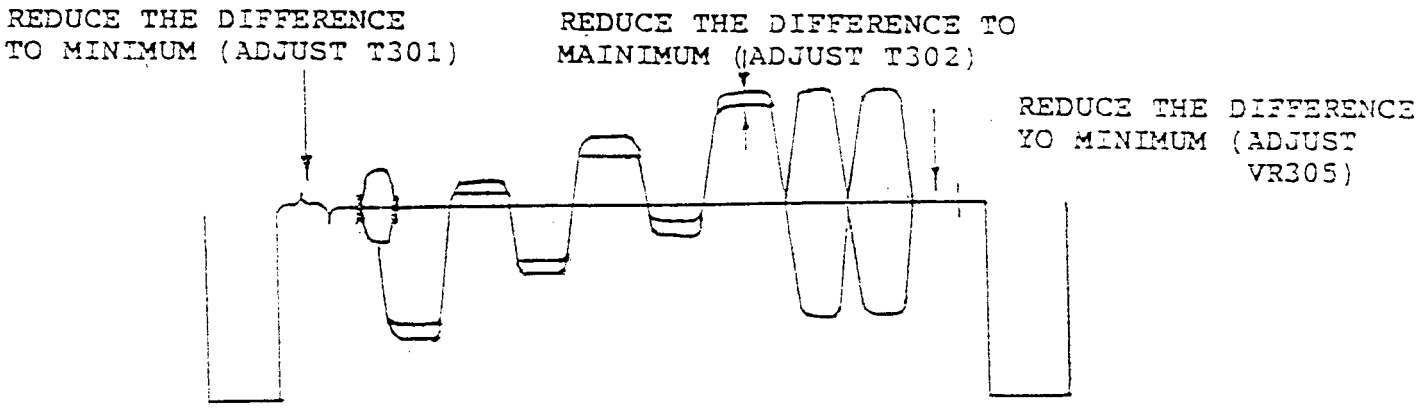

REDUCE THE DIFFERENCE TO MINIMUM (ADJUST T301)
REDUCE THE DIFFERENCE TO MAINIMUM (ADJUST T302)
REDUCE THE DIFFERENCE YO MINIMUM (ADJUST VR305)

Fig.6

COLOR SYNC. ADJUSTMENT

(1) Receive Philips pattern and warm up for five minutes.

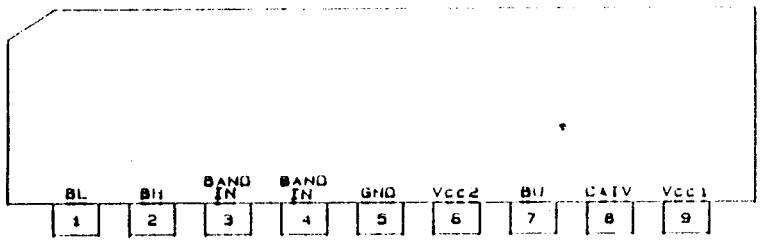
(2) Connect terminal TP302 and the earth with the short Jumper wire.

(3) Connect the TP306 and TP301 with 10K OHM resistor so that the color killer turns off.

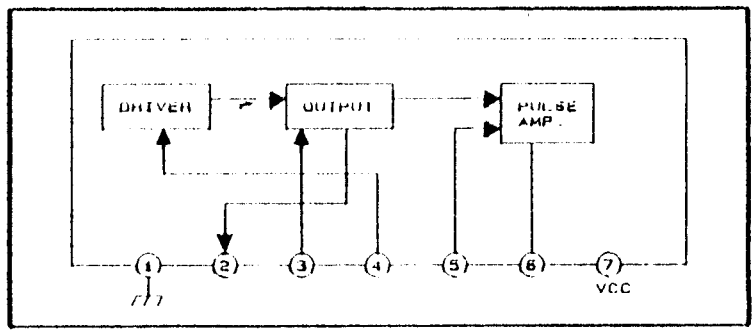
(4) Then the color stripes appear on the screen when the adjustment is inconnect. Adjust the color sync (CT301) so that the PHILIPS pattern stands still.

(5) Remove the 10K ohm resistor and jumper wire.

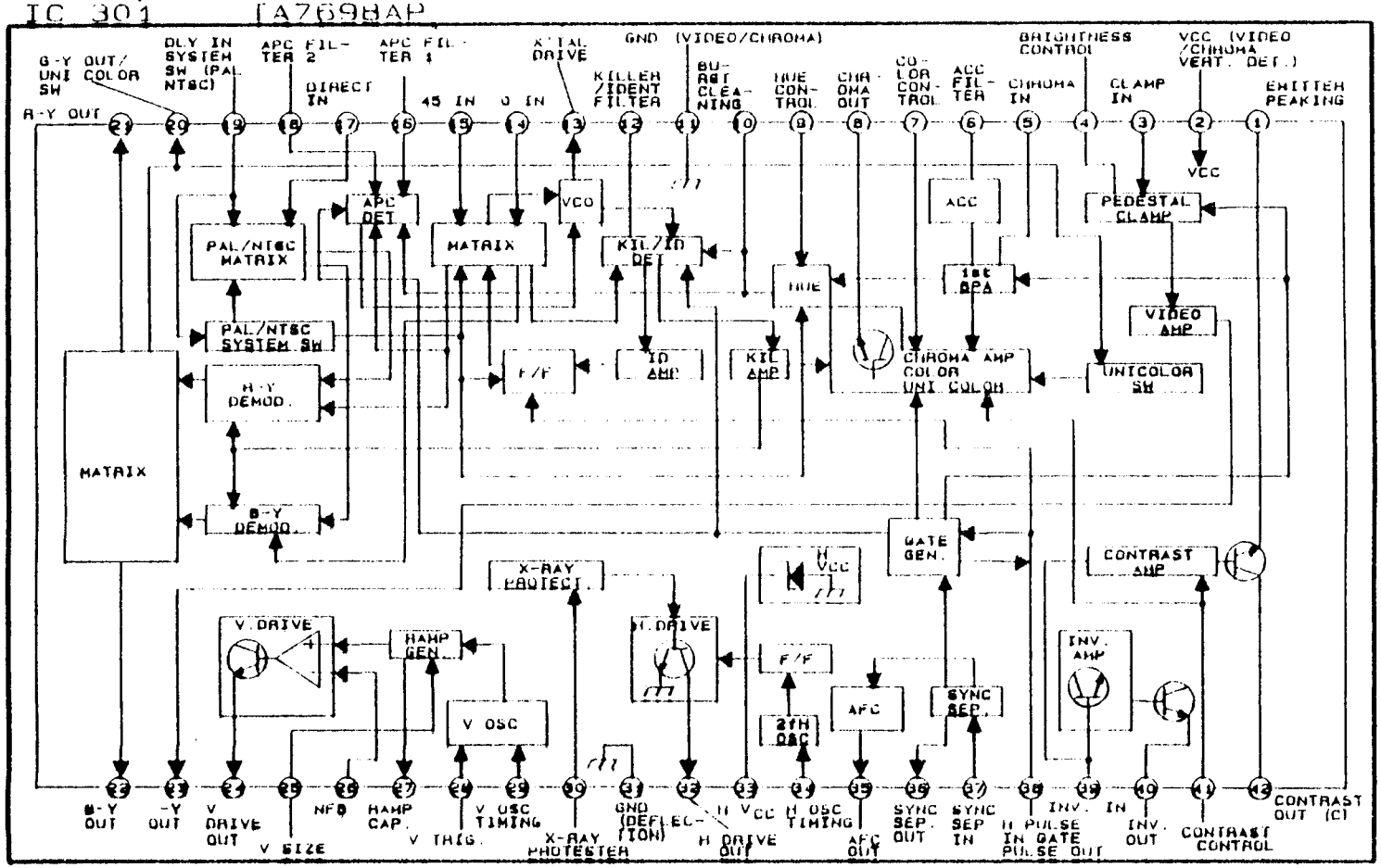
IC101 LA7910



IC 401 AN5521



IC 301 LA7698AP

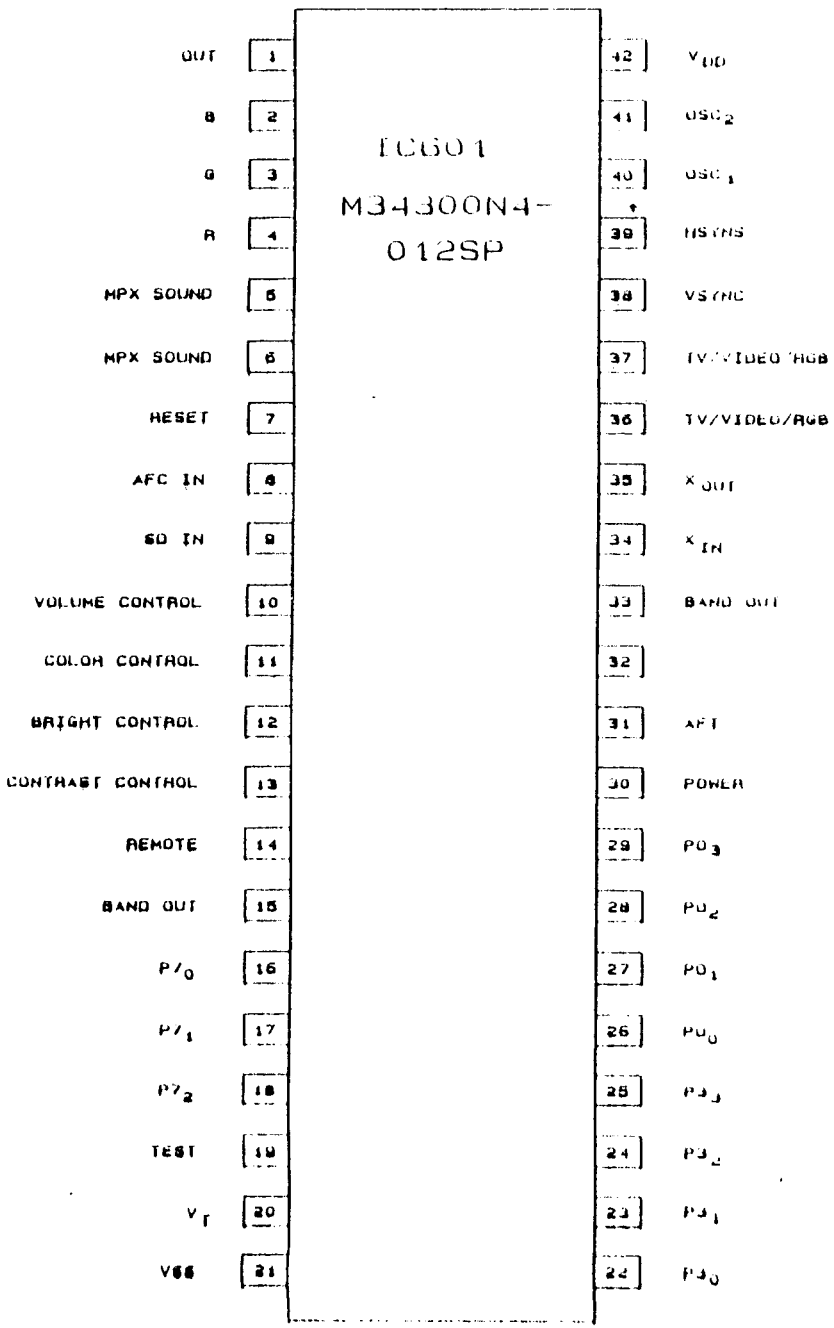


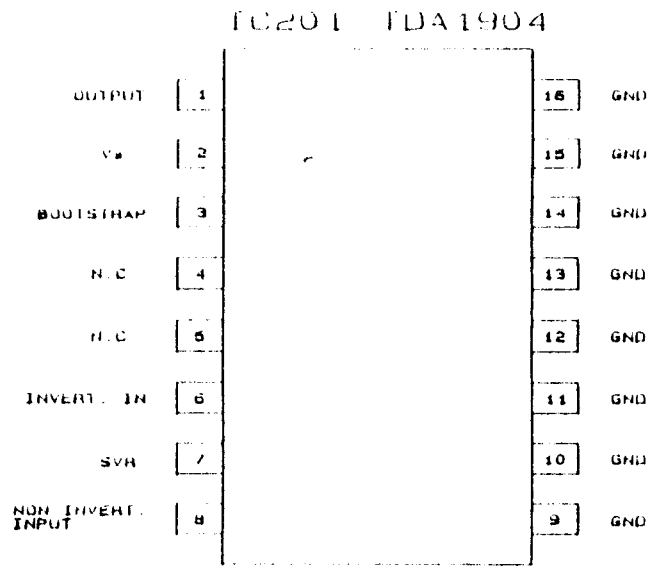
VOLTAGE TABLE FOR IC

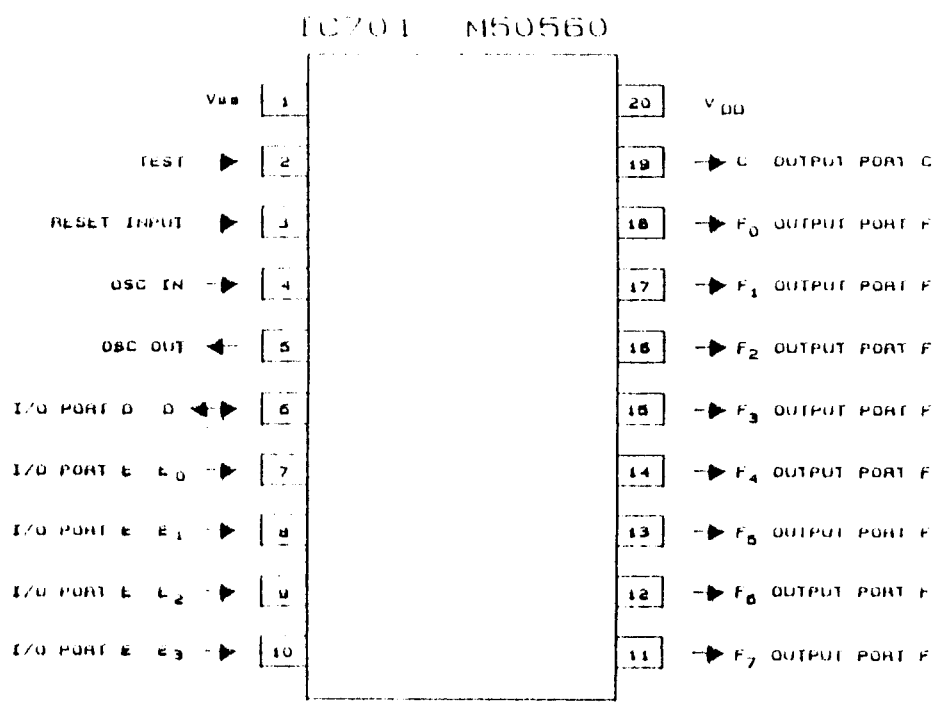
SYMBOL / PIN NO.	IC201 (V)	IC401 (V)	IC701 (V)			
1	0.7	GEN	GEN			
2	0.5	13	GEN			
3	9.5	25.9	3			
4	7.8	0.8	0			
5	16.4	0.3	3			
6	16.4	1.1	0			
7	10.2	25.7	3			
8			3			
9			3			
10			3			
11			NC			
12			0			
13			0			
14			0			
15			0			
16			0			
17			0			
18			0			
19			0			
20			3			

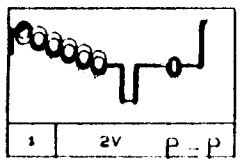
NOTE : VOLTAGE ARE TAKEN UNDER TUNED CONDITION WITH

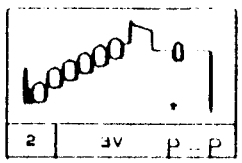
CONTRAST : Maximum Position
BRIGHTNESS : Maximum Position
COLOR : Maximum Position
SIGNAL INPUT : 80 dBuV
CHANNEL SETTING : The Last Channel of UHF High
SIGNAL PATTERN : Colour Bar

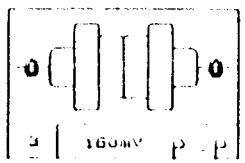

IC601
M34300N4-
012SP
OUT 1
B 2
G 3
R 4
MPX SOUND 5
MPX SOUND 6
RESET 7
AFC IN 8
SD IN 9
VOLUME CONTROL 10
COLOR CONTROL 11
BRIGHT CONTROL 12
CONTRAST CONTROL 13
REMOTE 14
BAND OUT 15
P70 16
P71 17
P72 18
TEST 19
VT 20
VSS 21
42 VDD
41 OSC2
40 OSC1
39 HSYNS
38 VSYNC
37 TV/VIDEO/RGB
36 TV/VIDEO/RGB
35 XOUT
34 XIN
33 BAND OUT
32
31 AFT
30 POWER
29 PD3
28 PD2
27 PD1
26 PD0
25 P33
24 P32
23 P31
22 P30

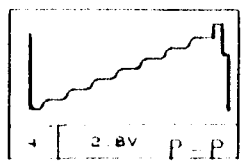

IC201 TDA1904
OUTPUT 1
VS 2
BOOTSTRAP 3
N.C 4
N.C 5
INVERT. IN 6
SVR 7
NON INVERT. INPUT 8
16 GND
15 GND
14 GND
13 GND
12 GND
11 GND
10 GND
9 GND

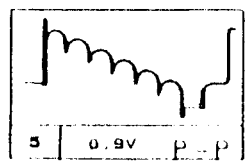

IC701 M50560
VDD 1
TEST 2
RESET INPUT 3
OSC IN 4
OSC OUT 5
I/O PORT D D 6
I/O PORT E E0 7
I/O PORT E E1 8
I/O PORT E E2 9
I/O PORT E E3 10
20 VDD
19 C OUTPUT PORT C
18 F0 OUTPUT PORT F
17 F1 OUTPUT PORT F
16 F2 OUTPUT PORT F
15 F3 OUTPUT PORT F
14 F4 OUTPUT PORT F
13 F5 OUTPUT PORT F
12 F6 OUTPUT PORT F
11 F7 OUTPUT PORT F

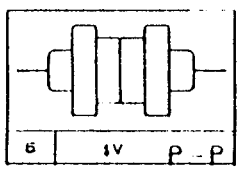

1
2V
P-P

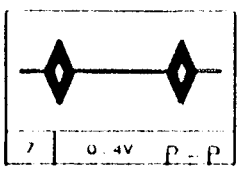

2
3V
P-P


3
160mV
P-P

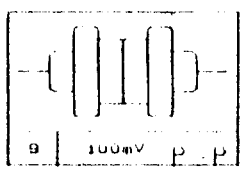

4
2.8V
P-P

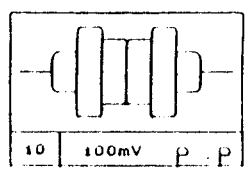

5
0.9V
P-P

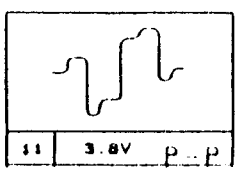

6
1V
P-P

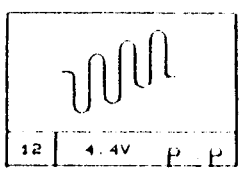

7
0.4V
P-P

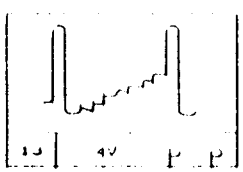
8
1.5V
P-P

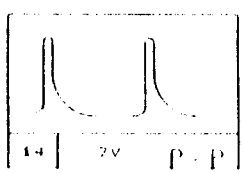

9
100mV
P-P

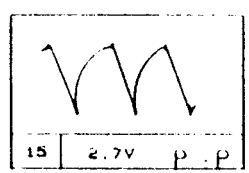

10
100mV
P-P

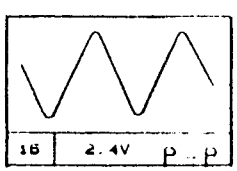

11
3.8V
P-P

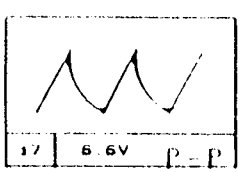

12
4.4V
P-P

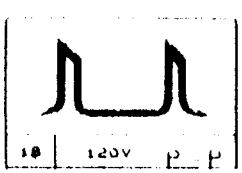

13
4V
P-P

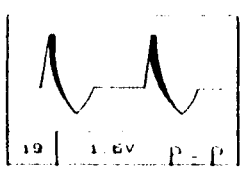

14
7V
P-P

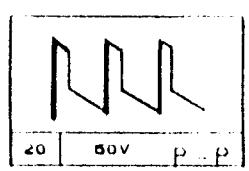

15
2.7V
P-P

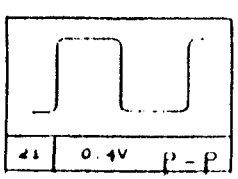

16
2.4V
P-P

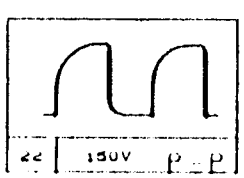

17
6.6V
P-P

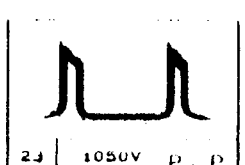

18
120V
P-P

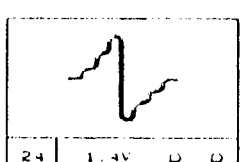

19
1.6V
P-P


20
50V
P-P


21
0.4V
P-P


22
150V
P-P


23
1050V
P-P


24
1.4V
P-P

SPÉCIFICATIONS	PAL B/G FTZ		PAL SECAM B/G FTZ		PAL I (UK)	PAL B/G
	B/G	CATV	B/G	CATV		
CHANNEL COVERANGE .... VHF LOW ..... VHF HIGH ..... UHF	2-4 CH 5-12 CH 21-69 CH	SS1 - SS2 CH S3 - S20 CH 21 - 69 CH	2-4 CH 5-12 CH 21-69 CH	SS1 - SS2 CH S3 - S20 CH 21 - 69 CH	21-69 CH	2-4 CH 5-12 CH 21-69 CH
FREQUENCY RANGE ..... VHF LOW ..... VHF HIGH ..... UHF	48,25-112,25 MHz 119,25-294,25MHz 471,25-855,25 MHz		48,25-112,25 MHz 119,25-294,25MHz 471,25-855,25 MHz		471,25-855,25 MHz	48,25-62,25 MHz 175,25-224,25 MHz 471,25-855,25 MHz
VISION/SOUND SEPARATION	5,5 MHz		5,5 MHz		6,0 MHz	5,5 MHz
IF FREQUENCY ..... VIDEO ..... SOUND ..... CHROMA	38,9 MHz 33,4 MHz		38,9 MHz 33,4 MHz		39,5 MHz 33,5 MHz 35,07 MHz	38,9 MHz 33,4 MHz 37,13 MHz
SENSITIVITY..... VHF LOW (AT 30 dB S/N) ..... VHF HIGH ..... VHF HIGH ..... UHF	47 dBuV 47 dBuV 50 dBuV		47 dBuV 47 dBuV 50 dBuV		 80 uV	32 uV 56 uV 80 uV
SCANNING..... LINES ..... HORIZONTAL ..... VERTICAL	625 LINES 15 625 Hz 50 Hz		625 LINES 15 625 Hz 50 Hz		625 LINES 15 625 Hz 50 Hz	625 LINES 15 625 Hz 50 Hz
C R T 14"	Diagonal 14" (35,5 cm) - Neck Diameter 22,5 MM - Deflection angle 90°					
C R T 20" & 21"	Neck Diameter 29,1" - Deflection angle 90°					
C R T 25" & 28"	Neck Diameter 29,1" - Deflection angle 110°					
ANTENNAL EXTERNAL : INPEDANCE	75 Ohms					
POWER CONSUMPTION FOR 14" FOR 20" & 21" FOR 25" & 28"	60 Watts 70 Watts 120 Watts					
SPEAKER FOR 14" FOR 20" & 21" FOR 25" & 28"	16 Ohms 1 W - ø 70 ou 2 x 8 Ohms 1 W - ø 70 2 x 8 Ohms 3 W - 70 x 105 ou 2 x 8 Ohms 3 W - ø 100 2 x 16 Ohms 4 W - 70 x 105					

VIF ALIGNMENT

A. PREPARATION STEP (See Fig. 1)

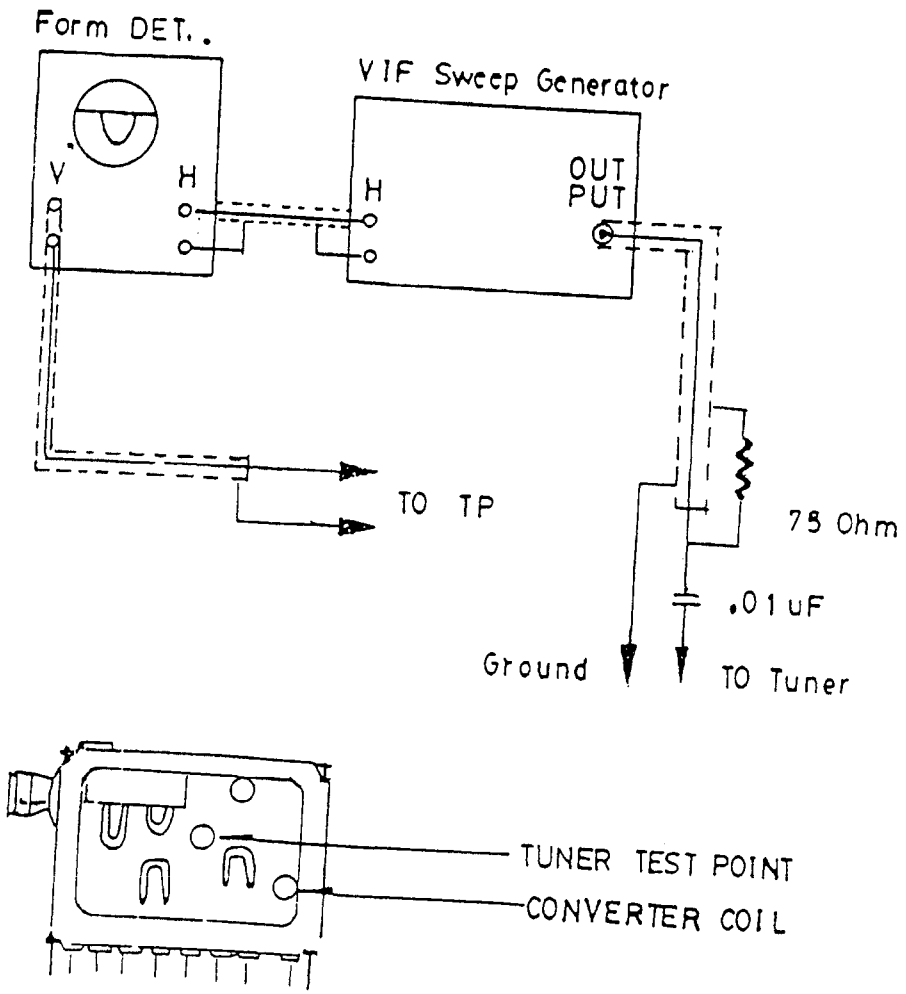
1 – Connect AGC bias boltage to TP101, the DC supply shoulb be turned off this time.

2 – Connect 14V B+ bias voltage to D404 (-) and groud.

3 – Connect sweep generator to tuner test point and ground.

4 – Connect waveform detector to TP105 and groud.

Fig. 1



B. TANK COIL ALIGNMENT STEP (See Fig. 2)

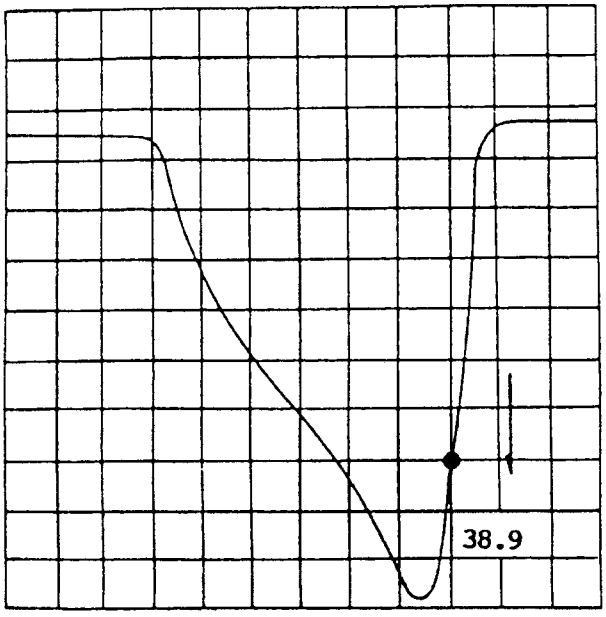
1 – Calibate the division o9f waveform detector equal to 100 mv per div.

2 – The output of sweep generator should be 50 dB.

3 – Connect TP001 to ground.

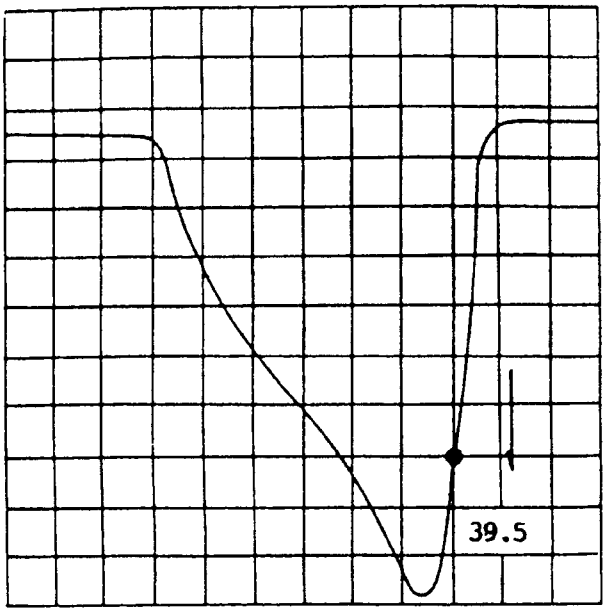
4 – Adjust AGC bias until the output waveform equal to 1V p.p.

Fig. 2



5 – Turn T101 until the marker 38,9 MHz fails to the lowest point as Fig. 2.

For : PAL B/G FTZ
PAL SECAM B/G FTZ
PAL B/G



5 – Turn T101 until the marker 39,5 MHz fails to the lowest point as Fig. 2.

For : PAL I (UK)

C. VIF ALIGNMENT

1 – Connect 100 ohm resistor between TP103 and TP104.

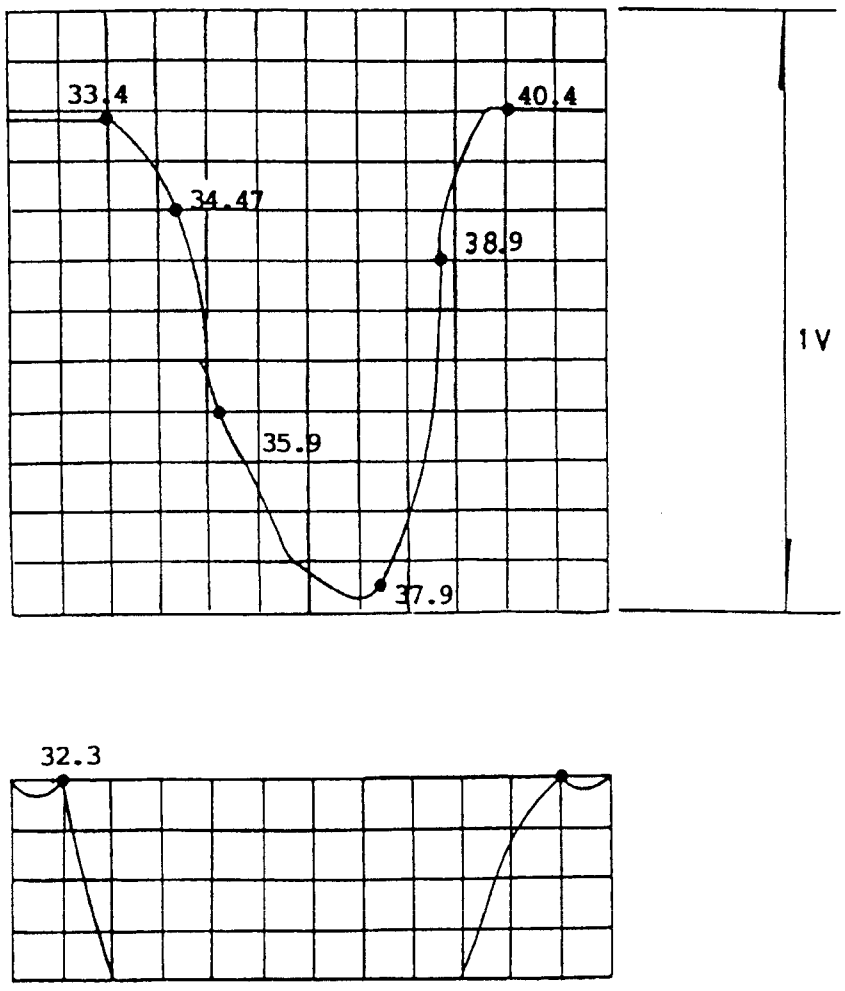
2 – Adjust T104 until obtain the maximum waveform amplitude (If provided).

3 – Adjust AGC bias, and maintain the waveform achieve 1V pp.

4 – Increase the output level of sweep generator in 10 dB adjust L101 to obtain the waveform as in Fig. 3.

5 – Set the sweet generator in 20 dB and adjust tuner convertor coil to obtain the waveform as Fig. 4.

Fig. 3



For : PAL B/G FTZ
PAL SECAM B/G FTZ

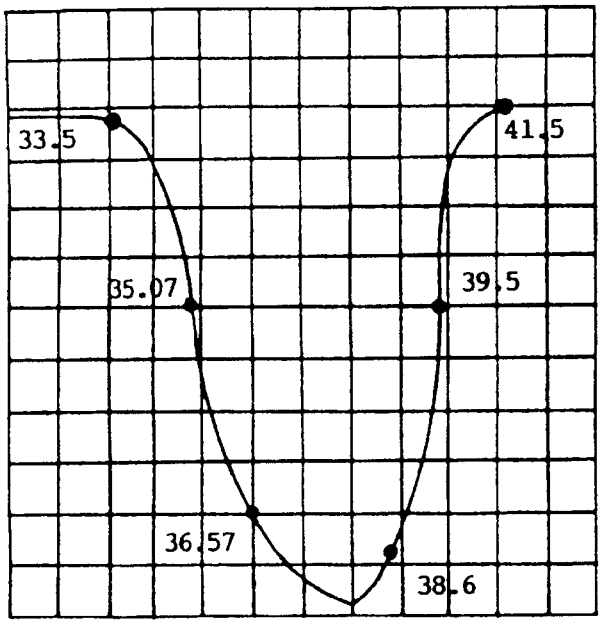
C. VIF ALIGNMENT

1 – Connect 100 ohm resistor between TP103 and TP104.

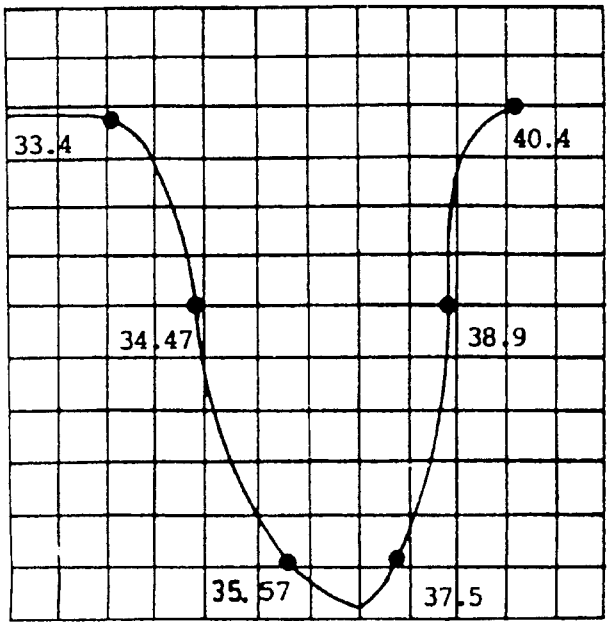
2 – Adjust T104 until obtain the maximum waveform amplitude (If provided).

3 – Adjust AGC bias, and maintain the waveform achieve 1V pp.

Fig. 3



For : PAL I (UK)



For : PAL B/G

D. AFC ALIGNMENT

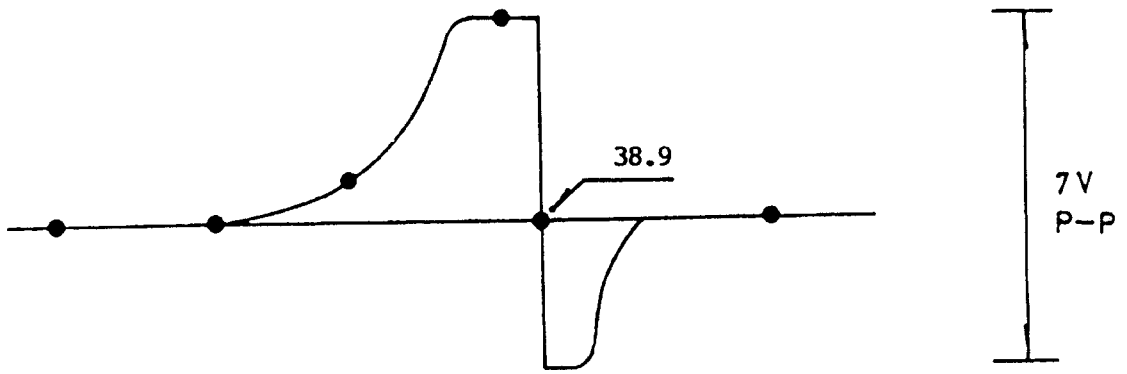
1 – Remove the 100 ohm resistor from TP103 and TP104.

2 – Connect the waveform detector to TP102. The output of sweep generator should be –40dB.

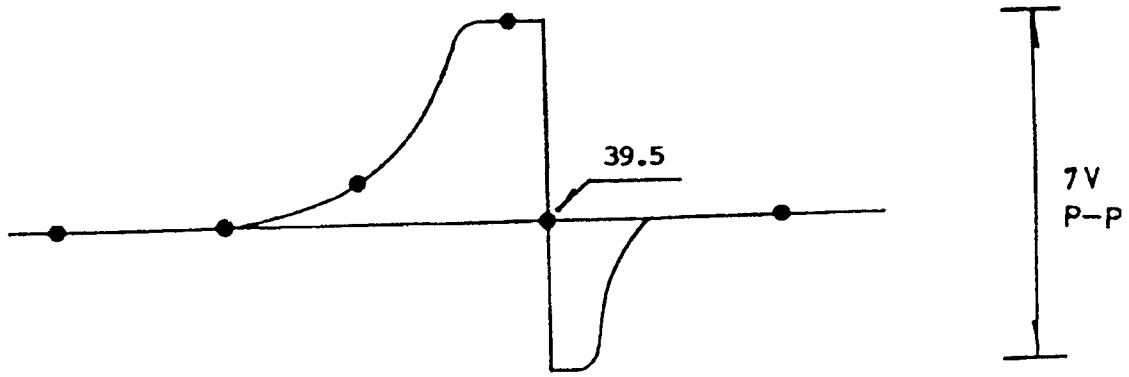
3 – Adjust AGC bias to 5V.

4 – Adjust T103 to obtain waveform as Fig. 4.

Fig. 4



For : PAL B/G FTZ
PAL SECAM B/G FTZ
PAL B/G



For : PAL I (U/K)

E. SIF ALIGNMENT

1 – Connect the sweep generator to TP105.

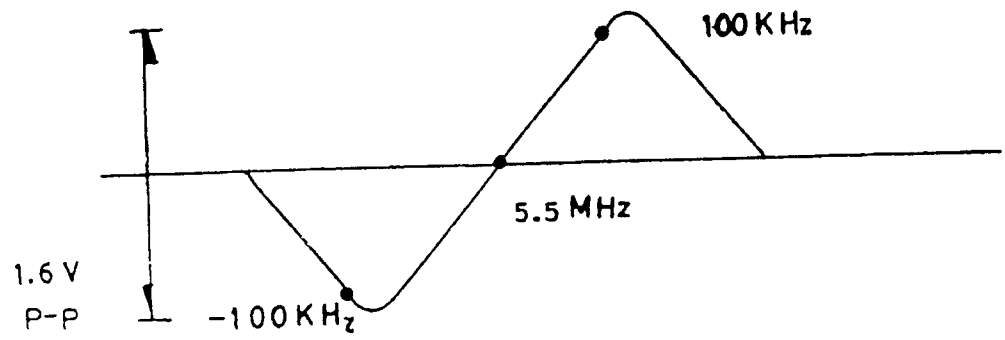
2 – Connect waveform detect to TP106.

3 – The output of sweep generator should be –50dB.

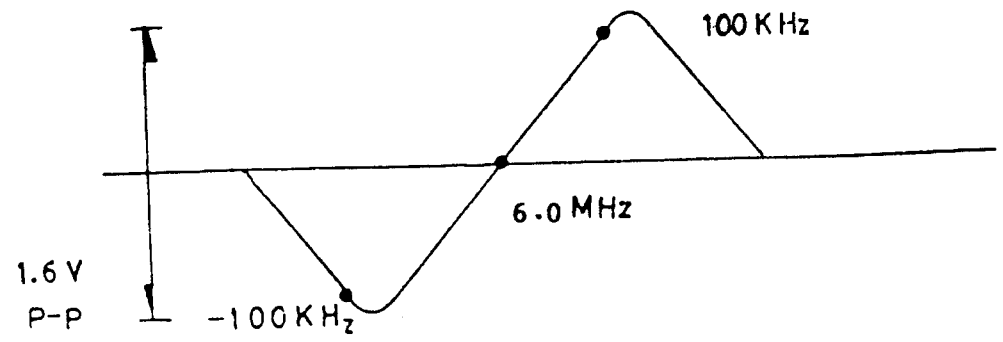
4 – Adjust T105 to obtain the waveform as Fig. 5.

Remark connect the TP001 and GND.

Fig. 5



For : PAL B/G FTZ
PAL SECAM B/G FTZ
PAL B/G



For : PAL I (UK)

B+ ADJUSTMENT

1 – Connect a digital volt meter to TPB+ and ground.
2 – Set brightness, contrast and colour to minimum.
3 – Adjust VR 901 and obtain a reading of 114V.

HORIZONTAL CIRCUIT ADJUSTMENT

1 – Receive monoscope pattern input signal 80dBuV.
2 – Connect terminal TP305 and the earth with the short jumper wire.
3 – Adjust VR304 to obtain picture running at center.
4 – Adjust VR303 to obtain picture at center.

VERTICAL CIRCUIT ADJUSTMENT

1 – Receive the monoscope pattern.
2 – Adjust V-size (VR301) to obtain a normal picture.

WHITE BALANCE ALIGNMENT STEP

(deguss the picture by dequassing coil if necessary)

1 – Turn the brightness, contrast and picture control to minimum value.
2 – Turn VR501, 503, 505 to middle position. Turn VR502, 504 to minimum position.
3 – Turn VR306 to middle position.
4 – Receive a black and white pattern.
5 – Set S301 to service position.
6 – Turn off the screen voltage.
7 – Turn on the screen control volume on flyback transformer, and a horizontal red line appears.
8 – Adjust VR502 to obtain a yellow line.
9 – Adjust VR504 to obtain a white line.
10 – Set S301 to normal position.
11 – Adjust VR503, 505 to make the picture uniformly white (9 300°K).

SUB-BRIGHTNESS ALIGNMENT

1 – Receive a colour bar pattern.
2 – Turn the brightness, contrast and colour to minimum.
3 – Adjust VR306 until the brightest bar can just be seen.

FOCUS ALIGNMENT

1 – Set the brightness and contrast to middle position.
2 – Receive a monoscope pattern.
3 – Adjust focus control to obtain sharpest picture.

AGC ALIGNEMENT

1 – Receive CH69 (UHF) and input field strength in 63dB ±3dB input.
2 – Adjust VR101 to the point where noise is disappeared.

For : PAL I (UK)

B+ ADJUSTMENT

1 – Connect a digital volt meter to TPB+ and ground.
2 – Set brightness, contrast and colour to minimum.
3 – Adjust VR 901 and obtain a reading of 112V.

HORIZONTAL CIRCUIT ADJUSTMENT

1 – Receive monoscope pattern input signal 80dBuV.
2 – Connect terminal TP305 and the earth with the short jumper wire.
3 – Adjust VR304 to obtain picture running at center.
4 – Adjust VR303 to obtain picture at center.

VERTICAL CIRCUIT ADJUSTMENT

1 – Receive the monoscope pattern.
2 – Adjust V-size (VR301) to obtain a normal picture.

WHITE BALANCE ALIGNMENT STEP

(deguss the picture by dequassing coil if necessary)

1 – Turn the brightness, contrast and picture control to minimum value.
2 – Turn VR501, 503, 505 to middle position. Turn VR502, 504 to minimum position.
3 – Turn VR306 to middle position.
4 – Receive a black and white pattern.
5 – Set S301 to service position.
6 – Turn off the screen voltage.
7 – Turn on the screen control volume on flyback transformer, and a horizontal red line appears.
8 – Adjust VR502 to obtain a yellow line.
9 – Adjust VR504 to obtain a white line.
10 – Set S301 to normal position.
11 – Adjust VR503, 505 to make the picture uniformly white (9 300°K).

SUB-BRIGHTNESS ALIGNMENT

1 – Receive a colour bar pattern.
2 – Turn the brightness, contrast and colour to minimum.
3 – Adjust VR306 until the brightest bar can just be seen.

FOCUS ALIGNMENT

1 – Set the brightness and contrast to middle position.
2 – Receive a monoscope pattern.
3 – Adjust focus control to obtain sharpest picture.

AGC ALIGNEMENT

1 – Receive CH69 (UHF) and input field strength jn 63dB ±3dB input.
2 – Adjust VR101 to the point where noise is disappeared.

For : PAL B/G FTZ – PAL SECAM B/G FTZ – PAL B/G

PAL COLOUR ALIGNMENT

1 – Receive philips pattern.

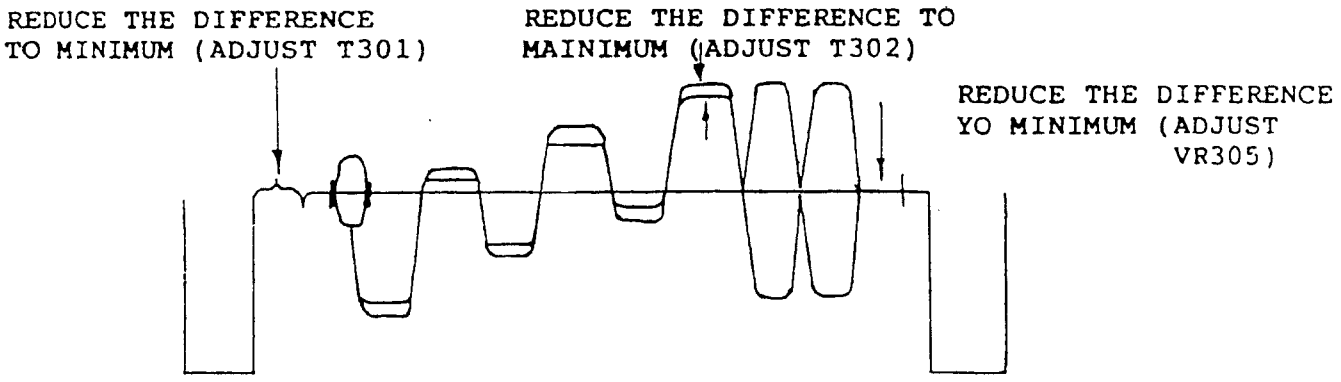
2 – Connect oscilloscope to 22 pin of IC801.

3 – Set the service switch (Z301) to service position.

4 – Set color control to maximum position.

5 – Adjust T301, 302 and VR305 to obtain the waveform as Fig. 6.

Fig. 6


REDUCE THE DIFFERENCE TO MINIMUM (ADJUST T301)
REDUCE THE DIFFERENCE TO MAINIMUM (ADJUST T302)
REDUCE THE DIFFERENCE YO MINIMUM (ADJUST VR305)

COLOR SYNC. ADJUSTMENT

1 – Receive philips pattern and warm up for five minutes.

2 – Connect terminal TP302 and the earth with the short Jumper wire.

3 – Connect the TP306 and TP301 with 10K OHM resistor so that the color killer turns off.

4 – Then the color stripes appear on the screen when the adjustment in inconnect. Adjust the colon sync (CT301) so that the PHILIPS pattern stands still.

5 – Remove the 10K ohm resistor and jumper wire.

For : PAL B/G FTZ – PAL SECAM B/G FTZ

PAL COLOUR ALIGNMENT

1 – Receive philips pattern.

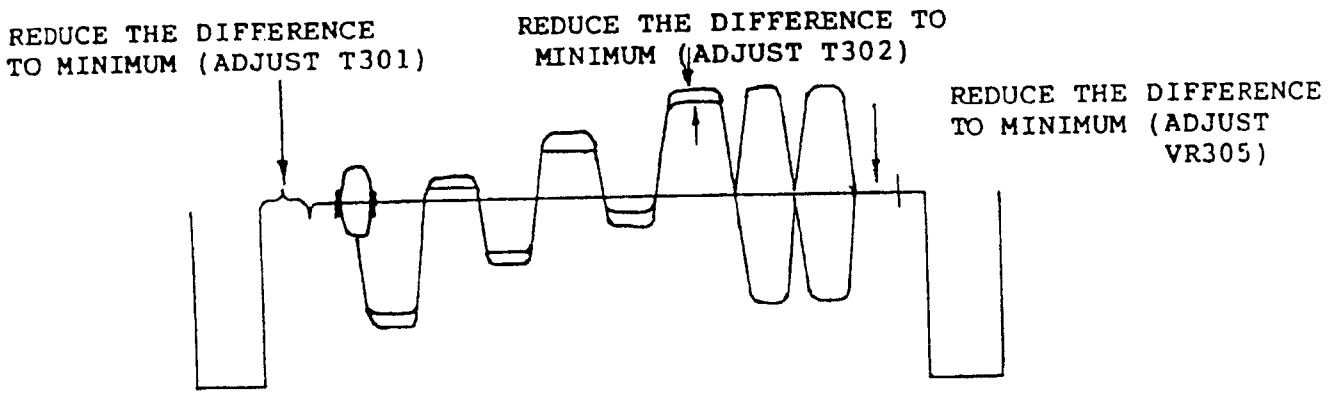
2 – Connect oscilloscope to TP303.

3 – Set the service switch (Z301) to service position.

4 – Set color control to maximum position.

5 – Adjust T301, 302 and VR305 to obtain the waveform as Fig. 6.

Fig. 6


REDUCE THE DIFFERENCE TO MINIMUM (ADJUST T301)
REDUCE THE DIFFERENCE TO MINIMUM (ADJUST T302)
REDUCE THE DIFFERENCE TO MINIMUM (ADJUST VR305)

COLOR SYNC. ADJUSTMENT

1 – Receive philips pattern and warm up for five minutes.

2 – Connect terminal TP302 and the earth with the short Jumper wire.

3 – Connect the TP306 and TP301 with 10K OHM resistor so that the color killer turns off.

4 – Then the color stripes appear on the screen when the adjustment in inconnect. Adjust the colon sync (CT301) so that the PHILIPS pattern stands still.

5 – Remove the 10K ohm resistor and jumper wire.

For : PAL I (UK) – PAL B/G

SECAM COLOUR ALIGNMENT

A. BELL FILTER ALIGNMENT

1 – Receive secam color bar pattern.

2 – Connect oscilloscope to TP804.

3 – Turn T804 to obtain waveform as Fig. 7.

Fig. 7

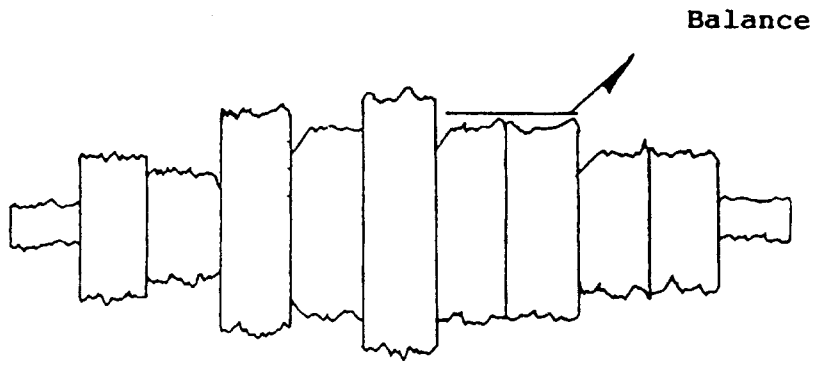


Fig.7

C. SECAM COLOUR KILLER ALIGNMENT

1 – Receive secam color bar signal.

2 – Connect a DC digital meter to IC801 pin 26.

3 – Turn T803 to obtain a maximum voltage.

For : PAL SECAM B/G FTZ

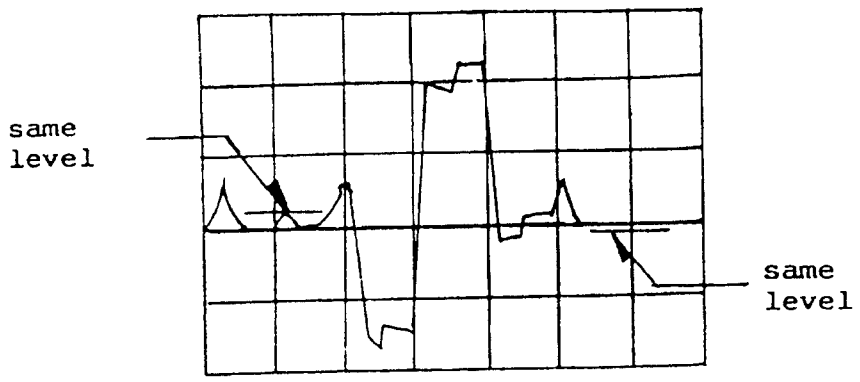
B. DISCRIMINATOR ALIGNMENT

1 – Receive secam color bar signal.

2 – Connect oscilloscope to TP803.

3 – Turn T801 to obtain the Fig. 8.

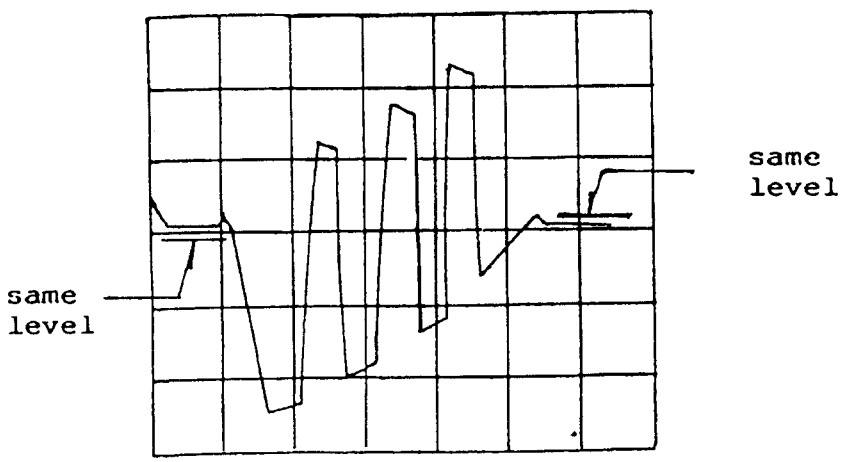
Fig. 8



4 – Connect the osilloscope to TP802.

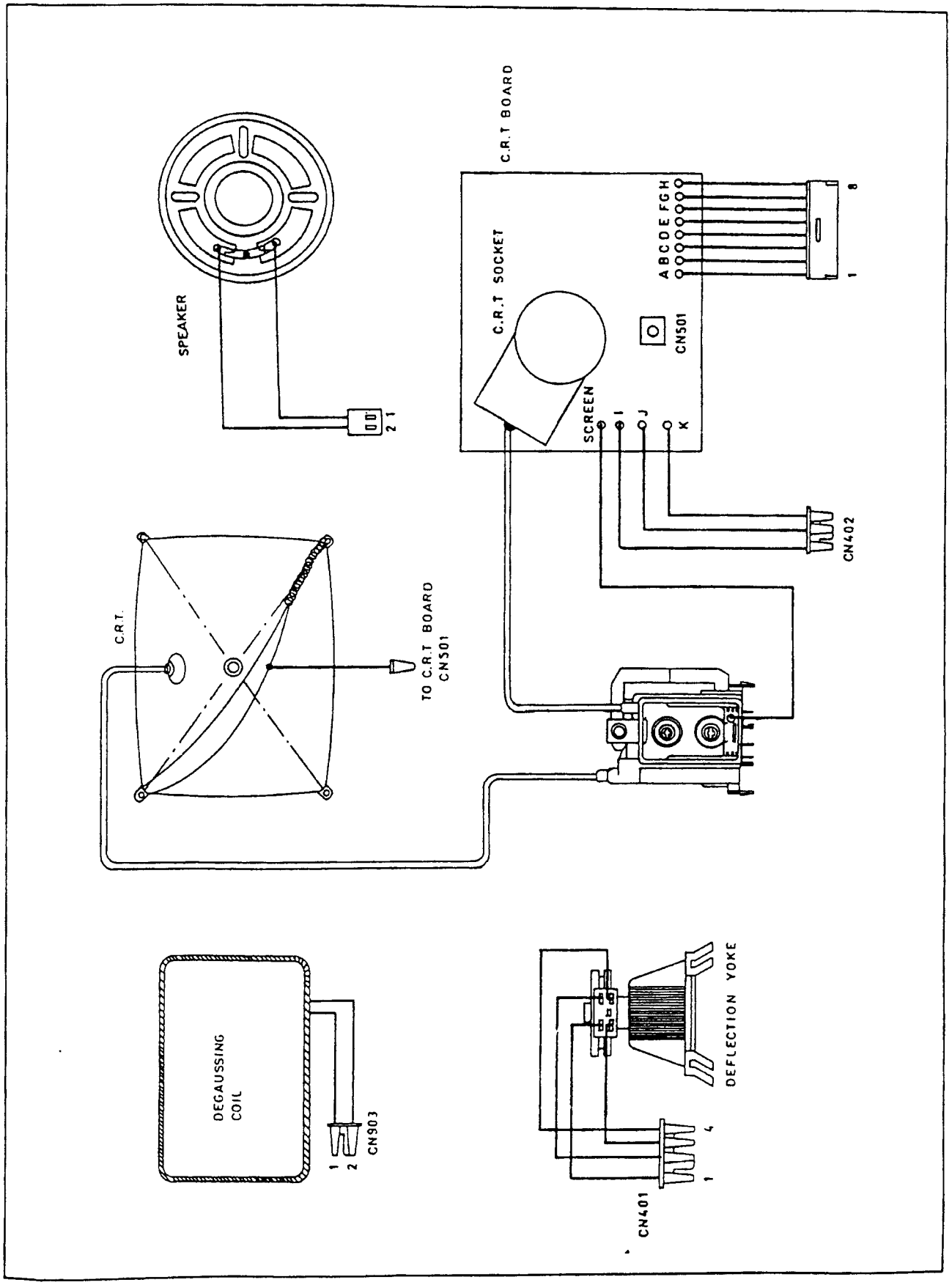
5 – Turn T802 to obtain the Fig. 9.

Fig. 9



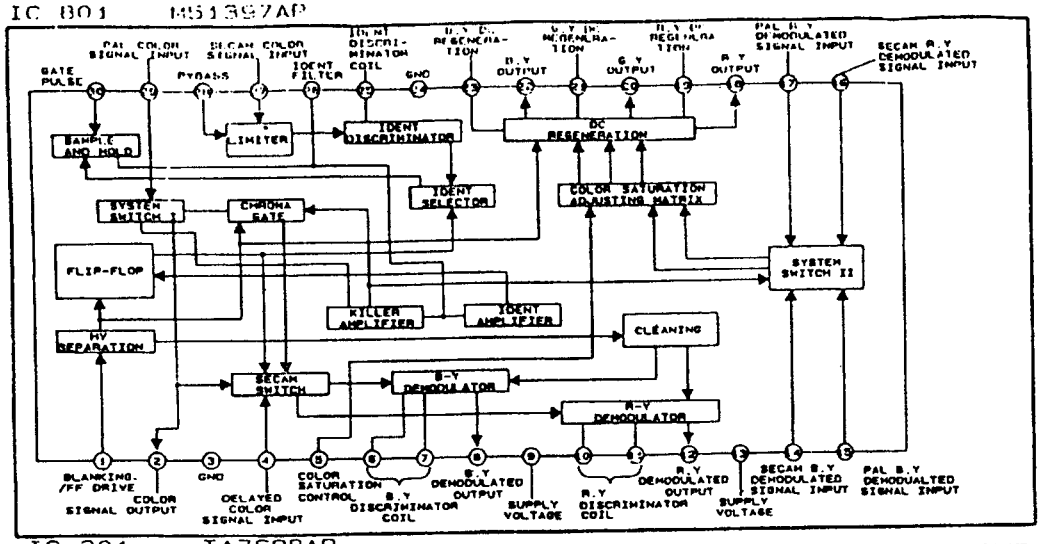
For : PAL SECAM B/G FTZ

WIRING DIAGRAM

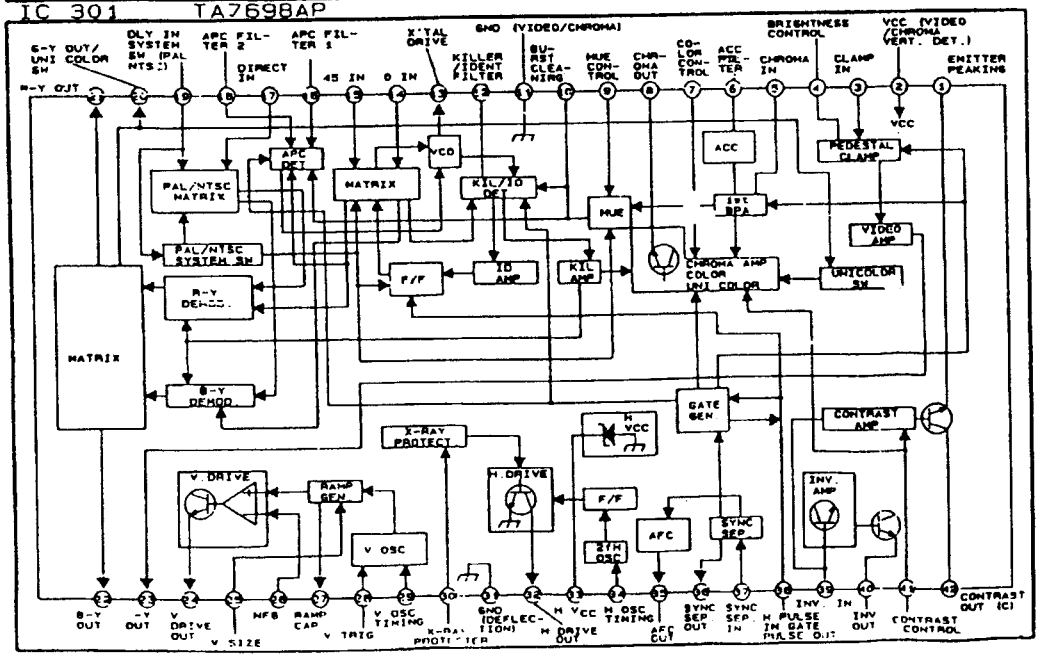


For : PAL I (UK) 14" ONLY

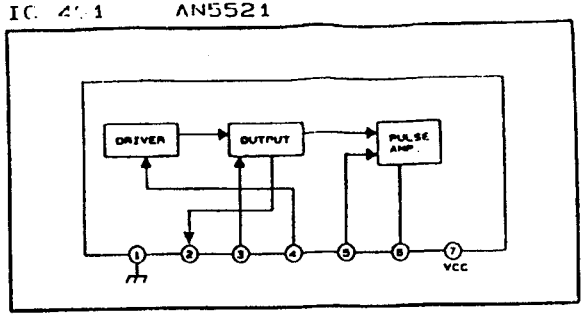
IC 801 M51397AP



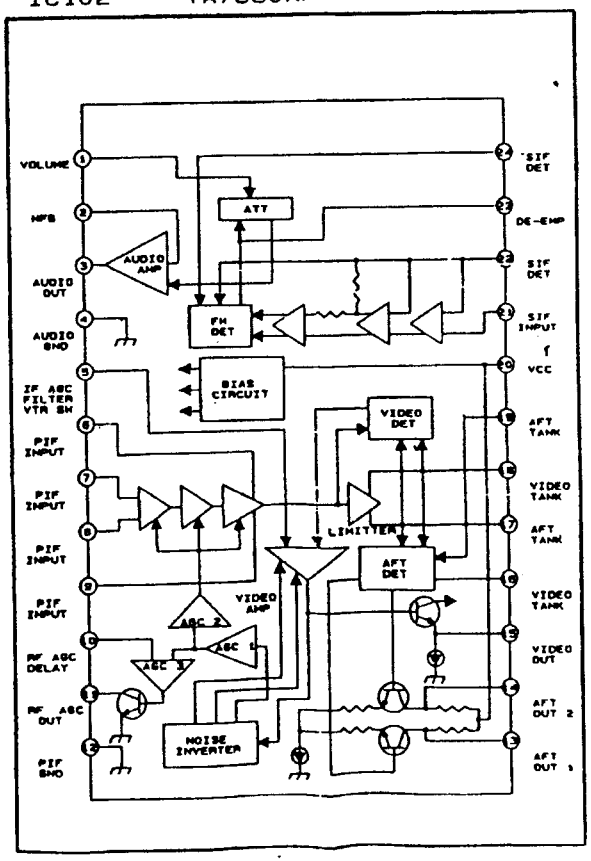
IC 301 TA7698AP

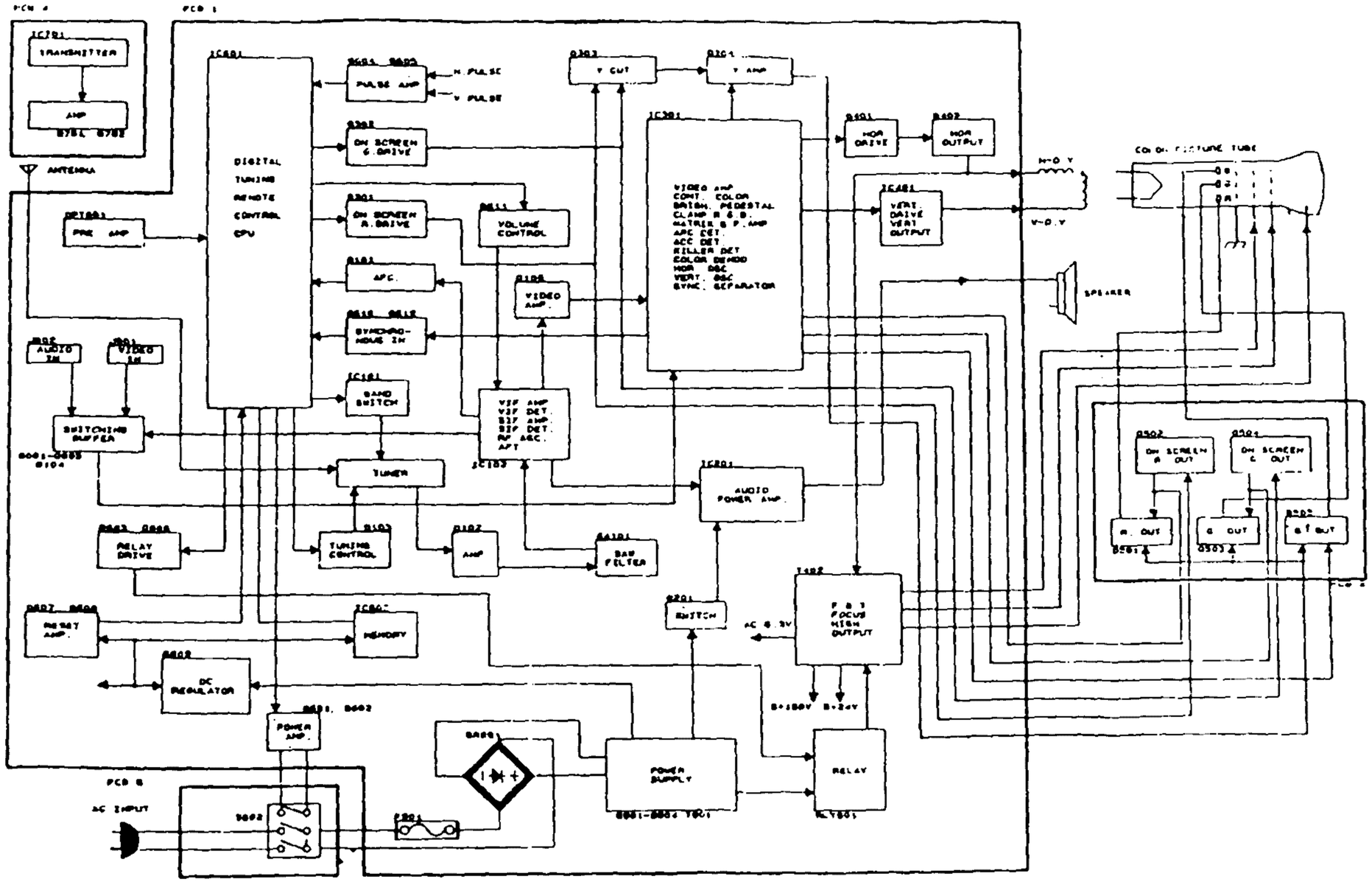


IC 4?1 AN5521

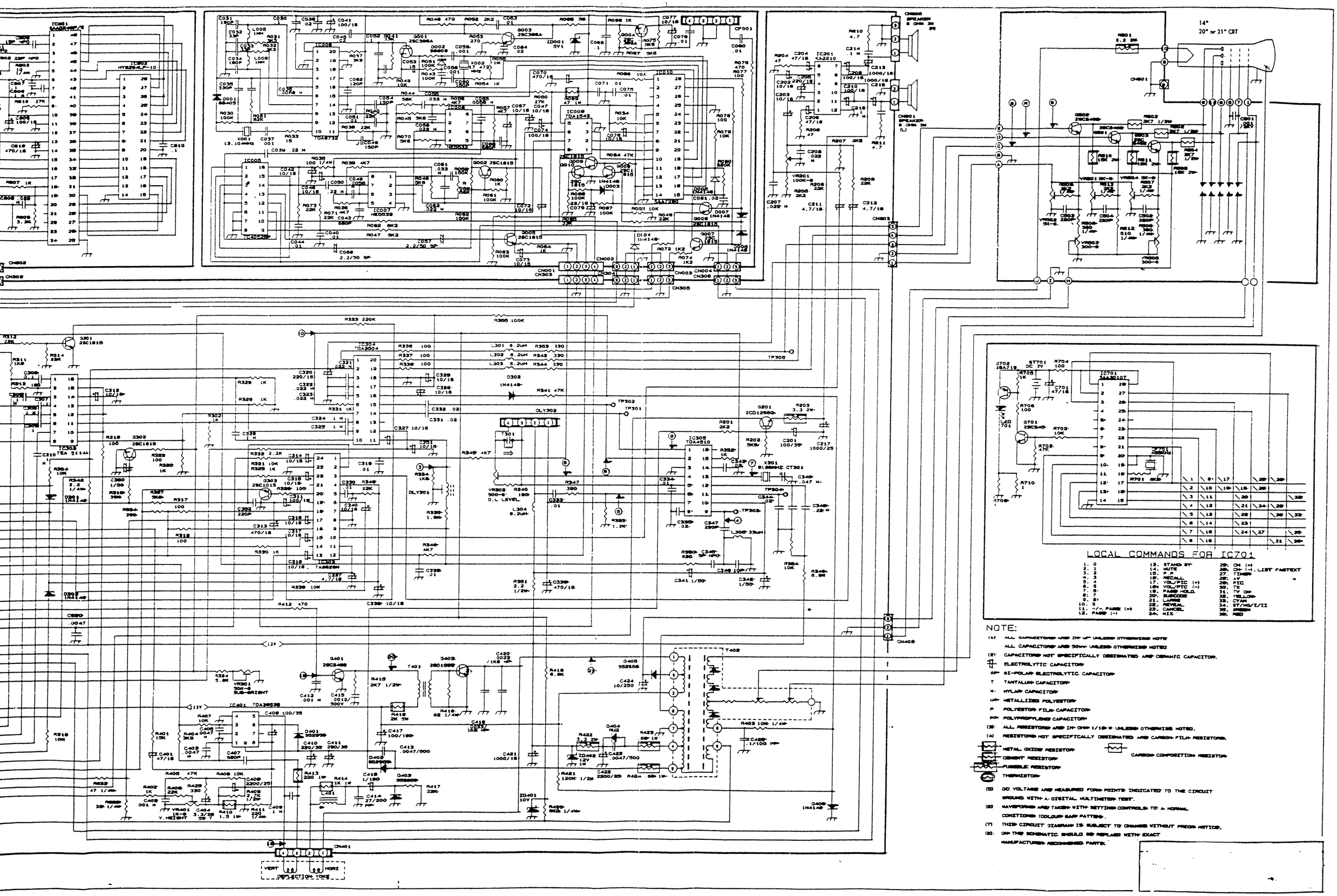


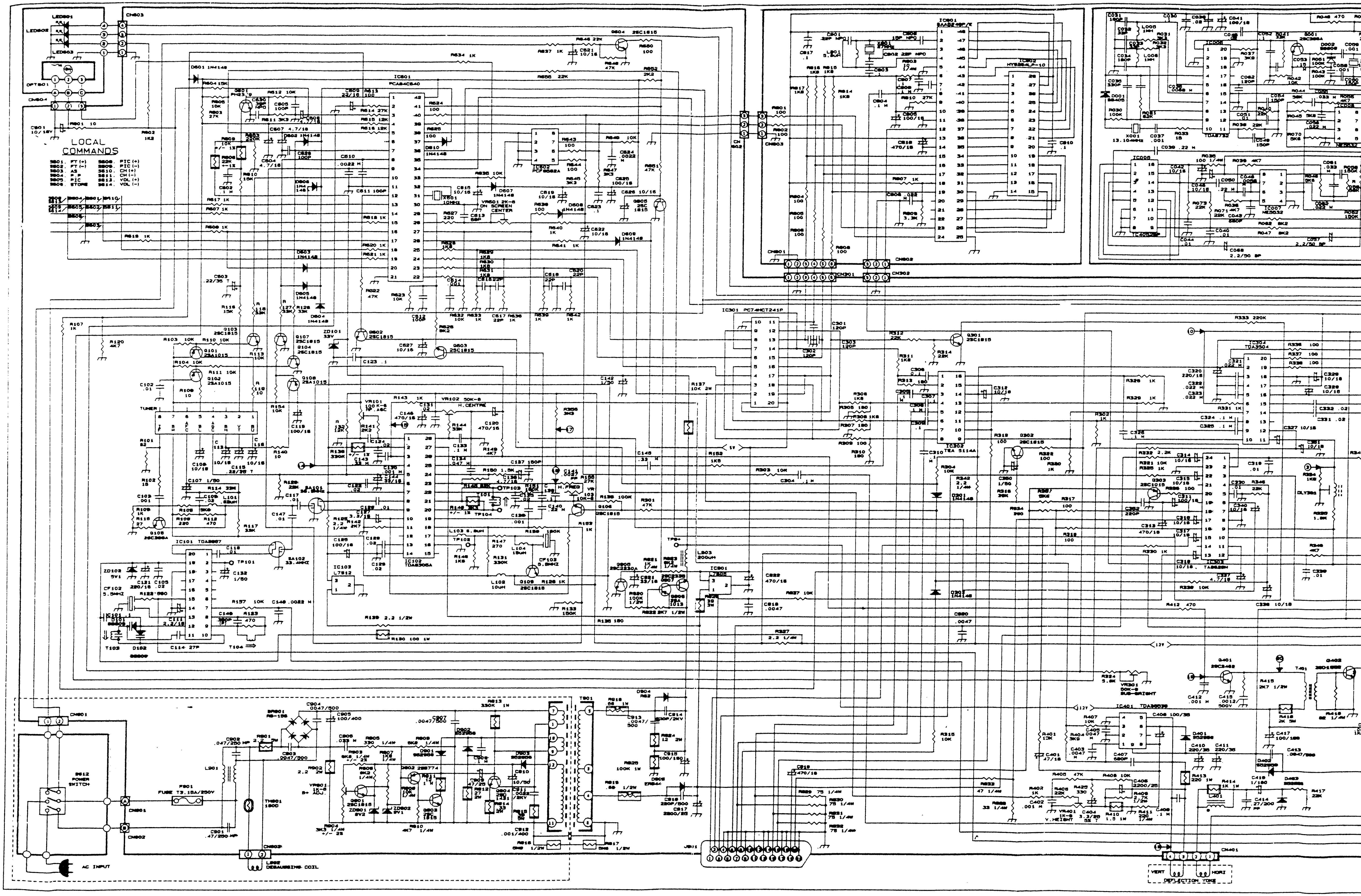
IC102 TA7680AP





THE QUALITY OF THIS MANUALS THE BEST THAT IST AVSILABLE


14"
20" or 21" CRT
LOCAL COMMANDS FOR IC701
1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. -/- PAGE (+)
12. PAGE (-)
13. STAND BY
14. MUTE
15. P-P
16. RECALL
17. VOL/PIC (+)
18. VOL/PIC (-)
19. PAGE HOLD
20. SUBCODE
21. LANGE
22. REVEAL
23. CANCEL
24. MIX
25. CH (+)
26. CH (-), LIST FASTEXT
27. TIMER
28. V
29. PIC
30. TV
31. TV ON
32. YELLOW
33. CYAN
34. ST/MO/I/II
35. GREEN
36. RED
NOTE:
(1) ALL CAPACITORS ARE IN uF UNLESS OTHERWISE NOTE
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED
(2) CAPACITORS NOT SPECIFICALLY DESIGNATED ARE CERAMIC CAPACITOR.
ELECTROLYTIC CAPACITOR
BI-POLAR ELECTROLYTIC CAPACITOR
T TANTALUM CAPACITOR
M- MYLAR CAPACITOR
MP METALLIZED POLYESTOR
P POLYESTOR FILM CAPACITOR
PP POLYPROPYLENE CAPACITOR
(3) ALL RESISTORS ARE IN OHM 1/10 W UNLESS OTHERWISE NOTED.
(4) RESISTORS NOT SPECIFICALLY DESIGNATED ARE CARBON FILM RESISTORS.
METAL OXIDE RESISTOR
CARBON COMPOSITION RESISTOR
CEMENT RESISTOR
FUSIBLE RESISTOR
THERMISTOR
(5) DC VOLTAGE ARE MEASURED FROM POINTS INDICATED TO THE CIRCUIT GROUND WITH A DIGITAL MULTIMETER TEST.
(6) WAVEFORMS ARE TAKEN WITH SETTINGS CONTROLS TO A NORMAL CONDITIONS (COLOUR BAR PATTERN).
(7) THIS CIRCUIT DIAGRAM IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
(8) ON THE SCHEMATIC SHOULD BE REPLACED WITH EXACT MANUFACTURER RECOMMENDED PARTS.


LOCAL COMMANDS
S801. FT (+)
S802. FT (-)
S803. AS
S804. P.P
S805. PIC
S806. STORE
S808. PIC (+)
S809. PIC (-)
S810. CH (+)
S811. CH (-)
S813. VOL (+)
S814. VOL (-)
LED801
LED802
LED803
OPT801
CN603
CN604
IC601 PCA84C640
IC602 PCF8582A
X601 10MHz
VR601 2K-B ON SCREEN CENTER
Q604 2SC1815
Q605 2SC1815
Q602 2SC1815
Q603 2SC1815
IC801 SAA5246P/E
IC802 HY6264LP-10
X801 27MHz
CN801
CN802
CN301
CN302
IC006 TDA8732
IC005 TC4053BP
IC007 NE5532
IC008 NE5532
Q001 2SC388A
X001 13.104MHz
IC301 PC74HCT241P
Q301 2SC1815
IC302 TEA 5114A
Q302 2SC1815
IC304 TDA3504
IC303 TA8628N
Q303 2SC1015
DLY301
TUNER
Q101 2SA1015
Q102 2SA1015
Q103 2SC1815
Q104 2SC1815
Q107 2SC1815
Q108 2SA1015
Q105 2SC388A
IC101 TDA2507
SA101 38.9MHz
SA102 33.4MHz
CF102 5.5MHz
IC102 TDA8305A
IC103 L7812
VR101 100K-B RF.AGC
VR102 50K-B H.CENTRE
VR103 10K-B H.FREQ
Q106 2SC1815
Q109 2SC1815
CF103 5.5MHz
Q805 2SC2230A
Q807 2SC2235
Q806 2SA1013
IC901 L7805
L803 200uH
Q401 2SC3482
Q402 2SD1555
T401
IC401 TDA3653B
VR401 1K-B V.HEIGHT
VR301 50K-B SUB-BRIGHT
CN401
VERT
HORI
DEFLECTION YOKE
S612 POWER SWITCH
AC INPUT
CN901
CN902
F901 FUSE T3.15A/250V
L901
TH901 18OD
CN903
L902 DEGAUSSING COIL
BR901 RS-156
Q901 2SC1815
Q902 2SB774
Q903 2SC1815
Q904 2SD1431
ZD901 8V2
ZD902 9V1
VR901 1K-B B+ ADJ.
T901
JB11